PORTER (M.F.)

SURGICAL DISEASES OF THE GALL-BLADDER AND GALL-DUCTS; WITH A REPORT OF FIVE CASES.

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SURGICAL DISEASES OF THE GALL-BLADDER AND GALL-DUCTS; WITH A REPORT OF FIVE CASES.[1]

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CASE I.—Mr. R., seventy years old, German, a shoemaker, after suffering for about three years with marked jaundice, pain in the hepatic region, distention of the stomach and bowels with gas, and having nearly died from hemorrhage from a slight scalp-wound of the vertex received during this period, was placed in the hospital under the care of Dr. H. McCullough, who, with myself, regarded the case as one of malignant disease. The patient lived but a short time thereafter, and a *post-mortem* examination revealed the existence of inflammatory obliteration of the common duct, while the gall-bladder was closely contracted about a gall-stone, and was attached to the transverse colon, with which it communicated through a small opening. In the cystic duct was a second stone. The hepatic duct was patulous, so that some bile escaped through it and the remains of the gall-bladder into the large intestine.[2]

CASE II.—Mrs. P., fifty-two years old, a mar-

[1] Read before the Indiana State Medical Society, May 13, 1892.

[2] This case was reported and the specimens shown to the Fort Wayne Academy of Medicine.

ried woman, suffered for several years from what she termed "wind in the stomach," and was rubbing her abdomen to allay the pain during an attack, when she discovered a tumor, for which she consulted me. The tumor was not tender, but manipulation of it occasioned distress in the epigastric region. A diagnosis of gall-stones in the gall-bladder was made, and cholelithotomy was performed. From this the patient recovered. She is at the present writing in good health, but has a hernia at the site of the incision. She had for years also suffered from an anal fistula, and this was operated upon subsequently.[1]

Case III.—Mrs. A., fifty years old, was seen by me, in consultation with Dr. H. McCullough, October 20, 1891. She gave a history of pain in the stomach, coming on at irregular intervals for several years, and accompanied by eructation of gas. She had never been jaundiced until the present illness. During the last illness she was unable to retain anything on the stomach. Examination showed the stomach to be somewhat distended with gas, which by pressure could be made to pass into the bowel, always with gurgling. No tumor could be detected. A diagnosis of obstruction at or near the pylorus and obstruction of the common bile-duct, due to an unknown cause, was made. Ten days after this visit the woman died. At the *post-mortem* examination the gall-bladder was found closely contracted about a calculus, and the common duct and duodenum, close to the pylorus, very much obstructed by adhesions resulting from a peritonitis of old standing.

Case IV.—Mrs. S., fifty-four years old, the mother of five children, in 1865 began to have

[1] A report of this case will be found in the Transactions of the Indiana State Medical Society for 1889.

severe "dead" pain in the right hypochondrium, ceasing suddenly. These pains recurred at intervals of from two weeks to two years until 1885, when, after doing some hard work, she was rather suddenly seized with the same pain, which continued to trouble her at intervals for eighteen months, when it disappeared, and she grew fleshy and strong. In 1889 she commenced losing flesh, and complaining of pain in the same region, remittent in character, accompanied by pronounced jaundice and intense itching of the whole cutaneous surface. Soon after this last attack commenced, there developed pain and a tumor in the left hypochondriac region. The patient has suffered much from piles, and lately from prolapsus ani, and complains greatly of distention of the stomach and bowels with gas. I saw her on January 15, 1892, when the foregoing history was obtained. She was much emaciated, deeply jaundiced, and had the expression of one who had suffered much.

On examination, the liver was found enlarged and hard; a tumor of the size and shape of the spleen, but rather harder, was detected in the left hypochondrium. A diagnosis of obstruction of the common or hepatic duct, probably by gall-stones, with enlargement of the liver and spleen, was made. The probability of malignancy was also entertained. Laparotomy was performed on February 20th, with the understanding that it might accomplish no more than the establishment of the diagnosis. The gall-bladder was found obliterated, and the hepatic or common duct bound to the posterior wall of the abdominal cavity, and containing three calculi, one of the size of a filbert, the others slightly smaller. The liver was slightly hobnailed in appearance, and hard. After trying to dislodge the calculi, and failing, the abdomen was closed. The case went on well until the morning of the fourth day, when the

pulse became so weak that the nurse could not count it, and the patient complained of suffocation. At 2 P.M. on the same day I saw her, when the pulse was 147, the temperature 99.5° F., and the sense of suffocation less. Whiskey had been given, and I ordered nothing else. By 6 P.M. the pulse was down to 93, and all again went on well until the fifteenth day, when the woman complained of being cold; the pulse was 152, and weak. A hypodermatic injection of twelve drops of tincture of digitalis was given, with one-fiftieth grain of strychnine. The pulse soon fell to 80, and continued between that and 90 until the twenty-third day, when the patient went home. The strychnine was continued for several days after her return home.

The stitches were removed on the eighth day, the wound having healed perfectly. Up to April 12th the patient was improving; the stools were usually well-colored; there had been no itching since the first few days after the operation, unless she took morphine, which she has had to do for the pain, which still continues, though in less severe a degree. She now takes one-sixteenth of a grain of morphine twice daily, whereas before operation she took a quarter of a grain. The jaundice is still marked, though less decided since the operation. The greatest inconvenience results from gaseous distention of the bowels and stomach.

CASE V.—Mrs. D., a German, thirty-three years old, mother of two children, was referred to me by Dr. Carl Schilling. She commenced having cramps in the stomach eleven years ago; they were very severe, and would cease suddenly. They continued to trouble her for eight years, since which time she has had none, but has complained daily of severe burning pain, commencing in the right hypochondrium, and extending to the epigastrium and back. One year ago she first noticed a lump in her side.

There is no clear history of jaundice, though the woman states that she has had "liver spots." Gas in the stomach and bowels has greatly distressed her during the whole of her illness. Examination revealed a freely movable tumor, apparently solid, in the region of the gall-bladder. A diagnosis of distention of the gall-bladder with gall-stones was made. Laparotomy was performed February 29, 1892. On opening the peritoneum, an elastic tumor was found; on introducing a trocar and canula, pus flowed freely. The gall-bladder was emptied, and explored with the finger and probe, but no stone was found. There were no adhesions. The bladder was stitched to the abdomen, and a rubber drain was left in. A sharp attack of peritonitis on the third day disappeared like magic under free catharsis from the use of salines. The stitches were removed on the eighth day, when the wound was healed, except where the drain had entered. The patient was allowed to get up on the fifteenth day, and left the hospital for her home on the twentieth day. The drain was removed on the twenty-third day. At no time was there more than the smallest quantity of pus in the discharge. At first this consisted of mucus, with very little bile, but subsequently it became clear bile, less profuse, and the woman expressed herself as well.

In three of the five cases here reported there was practically obliteration of the gall-bladder; that is, the viscus was so contracted, bound down, and changed, as to make it impossible to stitch it either to the abdominal wall or to the intestine. That this condition is of more frequent occurrence than we would be led to believe from the literature I feel sure, and it should be borne in mind in giving opinions in similar cases.

Kocher[1] performed a cholelithotripsy in a case in which the shrunken gall-bladder would not permit of the performance of the cholecystenterostomy.

Robson,[2] of Leeds, reports a case in which the gall-bladder was so far from the surface that he had to use the omentum to shut out the cavity of the peritoneum by first stitching the former to the gall-bladder, and then to the parietal peritoneum.

Shepherd,[3] of Montreal, used the liver and omentum for the same purpose in a similar case.

The use of contiguous tissues for the purpose indicated in the cases referred to offers hope in similar cases otherwise hopeless, and might have been applied in Case IV; but I feared that the woman would not withstand the shock of so prolonged an operation. Greater emphasis should be placed upon the diagnostic significance of the fermentation and consequent accumulation of gas in the stomach and bowels, together with pain and distress in the stomach. These phenomena also add evidence to the importance of the bile as an antiseptic. Piles and fistulæ, and rectal distress, are also of diagnostic significance. Of course, in Case III the gaseous distention of the stomach was in part due to the mechanical obstruction.

While empyema and dropsy of the gall-bladder are usually due to gall-stones, they may be due to other causes, and may be susceptible of cure by cholecystotomy. H. C. Dalton[4] reports two cases of

[1] Annual of the Universal Medical Sciences, vol. iii, 1891.

[2] Annals of Surgery, vol. xiv, No. 5.

[3] Ibid., vol. xii, p. 333.

[4] Annals of Surgery, vol. ix, p. 99, 100.

stricture of the gall-ducts due to inflammatory action from causes other than calculi.

Cases I and V further illustrate the difficulty of correct diagnosis.

Langenbuch,[1] who had performed twenty operations on the gall-bladder at the time, said: "Exploratory incision only will determine exactly with what kind of tumor we have to deal."

Tait[2] made a median section below the umbilicus for what he supposed to be a parovarian cyst, and found a distended gall-bladder.

Mears[3] made an exploratory incision in the lumbar region, in a case suspected to be one of floating kidney, but found a distended gall-bladder, with the cystic duct plugged by a calculus. His patient recovered.

West Hughes,[4] of Los Angeles, says: "So far as I can ascertain there have been only two other cases of non-adherent suppurating tumor of the gall-bladder successfully operated upon. There have been several such cases reported with fatal result, death being caused by suppurative peritonitis, due to the entrance of the contents of the gall-bladder into the peritoneal cavity. It would seem far better to operate in two stages, when this danger can be entirely eliminated." This danger of contamination of the peritoneum eliminated, there can be no doubt but that the completion of the operation at once is preferable. Careful sponge packing will not always suffice. My experience leads me to believe

[1] Annual of the Universal Medical Sciences, 1890, pp. 46, 47.
[2] Loc. cit.
[3] Annals of Surgery, vol. x, p. 241.
[4] Ibid., vol. xii, p. 338.

that the contamination comes not so often from leakage at the side of the canula at the point of perforation, but from the pus that flows over the extremity of the instrument and down upon abdomen, hands, sponges, etc. This may be effectually prevented by first passing the trocar and canula through a piece of dentists' rubber dam of sufficient size. Then, with the hand grasping the instrument between the abdomen and rubber, trocar and canula are introduced; the trocar being removed by an assistant, the pus flows over the rubber, leaving sponges, hands, and wound clean. If thought advisable, the cavity can be washed out before removing the canula. Had this idea occurred to me years ago I might have saved my patients some discomfort and myself much worry.

In Case IV, as in a case of gastrostomy already published,[1] I believe the hypodermatic use of digitalis prevented death. I desire to urge the use of digitalis in this way, ofttimes advantageously combined with strychnine, not only after abdominal section, but in all cases in which death threatens from heart-failure.

In all, five cases are here reported: Four of gall-stones, and one of empyema of the gall-bladder; there was one death from obstruction of the duodenum, and one from cholemia; there were two cholecystotomies, one for stones and one for empyema, both cured. There was one incomplete operation, the case being somewhat benefitted, though still suffering, and threatening soon to die of cholemia.

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[1] Journal American Medical Association, vol. xi, p. 123.